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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,644	10/22/2001	Karl K. Rink	AAI-14157	5405

7590 11/07/2003

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EXAMINER

CULBRETH, ERIC D

ART UNIT	PAPER NUMBER
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3616

DATE MAILED: 11/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/085,644

Applicant(s)

RINK ET AL.

Examiner

Eric D Culbreth

Art Unit

3616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 and 26-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17-20 and 28-30 is/are allowed.
- 6) ☒ Claim(s) 1-5, 12-16 and 26 is/are rejected.
- 7) ☒ Claim(s) 6-11 and 27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4&5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. In view of the canceled claims and amended/added claims in Paper No. 7, filed 8/22/03, none of the claims are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Election was made **without** traverse in Paper No. 7.

Following is an action on all the merits of all the claims in the application.

Drawings

2. The drawings were received on 8/22/03. These drawings are acceptable to the examiner.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 125 (page 25, line 15). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the non-circular cross section (claim 16) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

5. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

6. The disclosure is objected to because of the following informalities:

a. Regarding page 11, line 3, it is not clear what sheath covering is meant (there is no previous mention of a sheath covering in the specification).

b. Regarding page 16, line 9 and the remainder of the specification it is not clear what is meant by "sensitizing gas" (i.e., what defines sensitizing gas, and sensitizing in what manner).

c. Page 18, line 21 to page 19, line 1 is not clear ("argon of mixtures").

d. Regarding page 22, line 16, it is not clear what is meant by ITLX (this term is not familiar).

Appropriate correction is required.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-2, 12, 14, 16, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Brede et al (U.S. Patent 5,660,803, cited by applicant).

Brede et al disclose an inflator device 20 for inflating airbag 14 comprising elongated housing 18 with first and second opposing ends, non-gaseous fluid form gas generant material 36 (liquefied gas) in the housing between the first and second ends. Ignition element or initiator device 56, upon initiation, has a discharge portion (i.e, the combustion gas generated by initiation) in reaction contact with at least a portion of the quantity of generant 36 to react and produce gas (column 6, lines 26-32) (claim 1).

Initiator device 56 is disposed adjacent the housing 18 at a first end (Figure 3) (claim 2).

The liquefied gas would be a liquid (claim 12), housing 18 is tubular as seen in Figure 1 (claim 14), and as seen in Figure 1 is of non-circular cross section (claim 16). The air bag 14 is filled by initiating reaction of the material 36 in the housing 18 (claim 26).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3616

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

11. Claims 3-4 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brede et al in view of Bender (U.S. Patent 5,028,070, of record).

Bender discloses a woven hose or fabric 11 over a cylindrical tank or housing 10 with an initiator intermediate the ends of the inflator housing. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Brede et al to include a fabric over a housing as taught by Bender in order to keep the generator housing from being heated excessively (abstract of Bender), to include a cylindrical housing (i.e., a circular cross section housing) as taught by Bender in order to evenly distribute force around the housing, and to include the initiator intermediate the housing as taught by Bender in order to start the reaction near the middle of the inflator and more evenly distribute the reaction (as opposed to at the end).

12. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brede et al in view of Johnson et al (U.S. Patent 5,851,030).

Johnson et al discloses an ignition device 34 with ignition material 64 inside within housing 44 and substantially extending between first and second ends of housing 44. It would have been obvious to one of ordinary skill in the art at the time the invention was made to

Art Unit: 3616

modify Brede et al to include an ignition device in the housing extending substantially between the ends as taught by Johnson et al in order to enhance combustion of the gas generant.

13. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brede et al in view of Barnes et al (US Patent 5,684,269, cited by applicant).

Barnes et al discloses (column 2, line 63 – column 3, line 2) a gas generant material which is a slurry or paste as broadly recited. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Brede et al to include a paste as a gas generant material as taught by Barnes in order to use a known material for gas generant in air bag (as per the title of Barnes et al's patent).

Allowable Subject Matter

14. Claims 6-11 and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

15. Claims 17-20 and 28-30 are allowed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric D Culbreth whose telephone number is 703/308-0360. The examiner can normally be reached on Monday-Thursday, 9:30-7:00 alternate Fridays off.

Art Unit: 3616

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 703-308-2089. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

Eric D Culbreth
Primary Examiner
Art Unit 3616

Eric Culbreth
1/12/03

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